

Montana Natural Heritage Program

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Plant Species of Special Concern

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INTRODUCTION

The Montana Natural Heritage Program (MTNHP) maintains an inventory of the elements of biological diversity in Montana, including plant species, animal species, and plant communities that are known or suspected to be rare, sensitive, threatened, or endangered throughout their range or in Montana, or in need of further research.

The list of 334 vascular plant species of special concern and the list of 112 moss taxa and 3 lichen species of special concern in Montana summarizes current status and county distribution. The lists have been developed from numerous sources, including published and unpublished scientific literature, herbarium specimens, the Montana Rare Plant Project (Lesica *et al.* 1984), knowledgeable persons, a variety of cooperating agencies and organizations, and MTNHP field research.

These lists are periodically revised as new data become available. Changes since the most recent edition (Heidel 1997) are underlined for quick reference. New additions to the state flora--discoveries, annotations, taxonomic revisions, and obscure references--are in **bold and underlined**. Printed revisions are produced annually, while periodic updates will be available from our office or via our home page at <http://nris.state.mt.us/mtnhp/>.

The online Montana Rare Plant Field Guide (<http://nris.state.mt.us/mtnhp/plants/>) provides information on species status, general description, habitat, distribution, and references. It is accompanied by photographs of the species and their habitats and technical illustrations that aid in identification.

New location information for all species of special concern and watch species is always welcome. Comments and suggestions on list contents are invited, along with supporting documentation. The criteria for including species on the list and ranking them are available.

Search tools are now available online to determine the distribution of Montana plant species of special concern by county, by topographic quadrangle (7.5'), and by public land management unit. More detailed information requests can be placed by calling or writing MTNHP at the above address, via e-mail at mtnhp@nris.state.mt.us, or through the World Wide Web at <http://nris.state.mt.us/mtnhp/request/>.

HERITAGE PROGRAM RANKS

Taxa are evaluated and ranked by the Heritage Program on the basis of their global (range-wide) status, and their state-wide status according to a standardized procedure used by all Natural Heritage Programs (The Nature Conservancy 1992). These ranks are used to determine protection and data collection priorities, and are revised as new information becomes available.

For each level of distribution—global and state—species are assigned a numeric rank ranging from 1 (critically imperiled) to 5 (demonstrably secure). This reflects the species' relative endangerment and is based primarily on the number of occurrences of that species globally or within the state. However, other information such as date of collection, degree of habitat threat, geographic distribution patterns and population size and trends is considered when assigning a rank, and the number of occurrences listed below are suggestions, not absolute criteria.

For example, Clustered lady's-slipper (*Cypripedium fasciculatum*) is ranked G4 S2. That is, globally the species is apparently secure, while in Montana it is imperiled because of rarity, or because of other factors making it demonstrably vulnerable to extirpation.

RANK DEFINITION

- 1 Critically imperiled because of extreme rarity (5 or fewer occurrences, or very few remaining individuals), or because of some factor of its biology making it especially vulnerable to extinction.

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HERITAGE PROGRAM RANKS (continued)

RANK	DEFINITION
2	Imperiled because of rarity (6 to 20 occurrences), or because of other factors demonstrably making it very vulnerable to extinction throughout its range.
3	Vulnerable because of rarity (21 to 100 occurrences) or found in a restricted range even though it may be abundant at some of its locations.
4	Apparently secure, though it may be quite rare in parts of its range, especially at the periphery.
5	Demonstrably secure, though it may be quite rare in parts of its range, especially at the periphery.
U	Possibly in peril, but status uncertain; more information needed.
H	Historical, known only from records over 50 year ago; may be rediscovered.
X	Believed to be extinct; historical records only.

OTHER HERITAGE CODES

G#G# Numeric range rank: A range between two of the
 S#S# numeric ranks. Denotes range of uncertainty about the exact rarity of the species.

SUBRANK

T Rank for subspecific taxon (subspecies or variety); appended to the global rank for the full species, e.g. G4T3.

QUALIFIERS

Q Taxonomic questions or problems involved, more information needed; appended to the global rank, e.g. G3Q.
 ? Inexact or uncertain: for numeric ranks, denotes inexactness.

FISH AND WILDLIFE SERVICE STATUS

The symbols in this column denote the categories defined in the U.S. Fish and Wildlife Service Notice of Review (1980, 1983, 1985, 1990, 1993, 1996) and indicate the status of a taxon under the federal Endangered Species Act of 1973 (16 U.S.C.A. § 1531-1543 (Supp. 1996)).

LE listed endangered (**none in Montana**)
 LT listed threatened (**two in Montana**)
 P proposed endangered or threatened (**one in Montana**)

FOREST SERVICE STATUS

The status of sensitive species on Forest Service lands is defined by the U.S. Forest Service Manual (2670.22). These taxa are listed as such by the Regional Forester (Northern Region) on National Forests in Montana.

T/E/P listed as Threatened (LT) or Endangered (LE) under the Endangered Species Act or Proposed for listing as Threatened or Endangered (P); and known or suspected on national forests (also referred to as Type 1 scale of risk).

S sensitive species, subspecies or variety, for which the Regional Forester has determined there is a concern for population viability rangewide or in the region (also referred to as Type 2 scale of risk for rangewide imperilment, and Type 3 scale of risk for regional imperilment).

BUREAU OF LAND MANAGEMENT STATUS

The status of species on Bureau of Land Management Lands is defined by the BLM 6840 Manual and designated by the Montana State Office of the BLM in 1996:

S sensitive species--proven to be imperiled in at least part of its range and documented to occur on BLM lands.
 W watch species--either known to be imperiled and suspected to occur on BLM lands; suspected to be imperiled and documented on BLM lands; or needing further study for other reasons.

COUNTY DISTRIBUTION

Counties in which a species occurs are indicated by the first four letters of the county name, except Yellowstone National Park which is designated by YNPK. Distribution information reflects records in the Heritage Program's database at the time of the list update. These can include county records that are historic, extirpated, or unmappable.

RANGE NOTES

Taxa which are globally restricted to an area less than half the size of Montana are noted in this column as endemics.

SE state endemic
 RE regional endemic, endemic species with range that extends beyond the state boundaries

The rest of the taxa have broader global distributions and are noted in this column as one of the following:

D Disjunct
 P Peripheral
 S Sparse

CHANGES FROM THE JUNE, 1997 LIST

Additions and deletions to the state list are the result of new information resulting from fieldwork and taxonomic research.

ADDITIONS

VASCULAR PLANTS

Alnus rubra
Astragalus lackschewitzii
Balsamorhiza hookeri
Botrychium pallidum
Carex pallescens
Erigeron tener
Mimulus patulus
Puccinnellia lemmonii
Ribes laxiflorum
Ribes velutinum
Sisyrinchium septentrionale

BRYOPHYTES

Tortula caninervis

LICHENS

Cetraria subalpina
Collema curtisporum

DELETIONS

VASCULAR PLANTS

Agoseris lackschewitzii
Agrostis borealis
Allium fibrillum
Artemisia norvegica var. *saxatilis*
Astragalus molybdenus
Bidens comosa
Botrychium minganense
Calamagrostis tweedyi
Carex nelsonii
Carex neurophora
Conioselinum scopulorum
Cryptantha flavoculata
Cryptantha humilis
Gentiana prostrata
Gentianella tenella
Halenia deflexa
Helenium hoopesii
Juncus triglumis
Mirabilis hirsuta
Myosotis verna
Salix cascadiensis

SELECTED REFERENCES

- Dorn, R. D. 1984. Vascular Plants of Montana. Mountain West Publishing, Cheyenne, WY. 276 pp.
- Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 3+ vols. New York and Oxford. (Note: *The Montana Plant Species of Special Concern* is moving toward consistency with the taxonomic treatments in the *Flora of North America*.)
- Lesica, P., G. Moore, K. M. Peterson, and J. H. Rumely. 1984. Vascular plants of limited distribution in Montana. Montana Academy of Science Monograph No. 2.
- Lesica, P. and J. S. Shelly. 1991. Sensitive, threatened and endangered vascular plants of Montana. Montana Natural Heritage Program, Montana State Library, Helena, Montana
- The Nature Conservancy, Conservation Science Division, in association with the Network of Natural Heritage Programs and Conservation Data Centers. October 1992. Biological and Conservation Data System (Supplement 2+, released March, 1994). Arlington, Virginia.
- U.S. Fish and Wildlife Service. 1996. Notice of Review of Plant and Animal Taxa for Listing as Endangered and Threatened Species. 61 FR 7596, February 28, 1996.
- U.S. Fish and Wildlife Service. 1993. Endangered and threatened wildlife and plants. 50 CFR 17.11 & 17.12, August 23, 1993. U. S. Govt. Printing Office: 1993-342-477/94033. 40 pp.

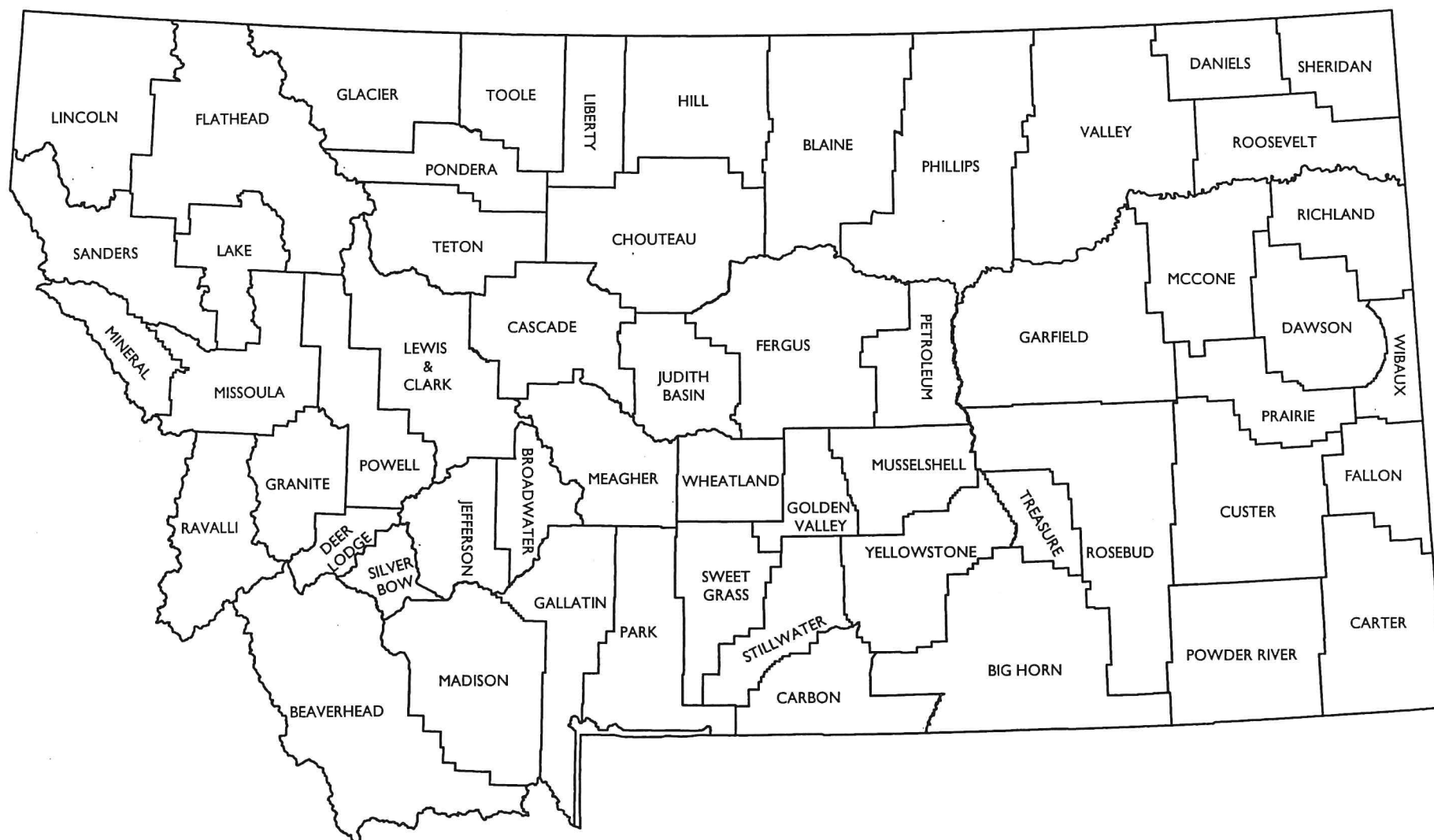
MORE INFORMATION

Extensive additional information, including location data, is available on most species listed here. MTNHP serves as a clearinghouse for information on species of special concern in the state, and each year responds to hundreds of data requests.

The preferred citation for this document is:

Heidel, B. 1999. Montana plant species of special concern. [Unpublished list.] Montana Natural Heritage Program, Helena. 26 pp.

Montana Counties



VASCULAR PLANT SPECIES OF SPECIAL CONCERN, MARCH 1999

Scientific Name Common Name	Family	Global Rank	State Rank	FWS Status	FS Status	BLM Status	County Distribution	Range Notes
<i>Adoxa moschatellina</i> Musk-root	Adoxaceae	G5	S1		S	W	Gran, Jeff, Stil	S
<i>Agastache cusickii</i> Cusick's Horse-mint	Lamiaceae	G3G4	S1		S	S	Beav	RE
<i>Allium acuminatum</i> Tapertip Onion	Liliaceae	G5	S1		S		Madi, Rava, Sand	P
<i>Allium columbianum</i> Columbia Onion	Liliaceae	G3	S1				Sand	D
<i>Allium parvum</i> Small Onion	Liliaceae	G5	S2		S		Rava	P
<i>Allium simillimum</i> Dwarf Onion	Liliaceae	G4	S1				Gall, Rava	RE
<i>Allotropa virgata</i> Candystick	Monotropaceae	G4	S3		S		Beav, Deer, Gran, Rava	D
<i>Alnus rubra</i> Red Alder	Betulaceae	<u>G5</u>	<u>S1</u>				Linc	D
<i>Amerorchis rotundifolia</i> Round-leaved Orchis	Orchidaceae	G5	S2S3		S	W	Flat, Glac, Lewi, Linc, Pond, Powe, Teto	P
<i>Ammannia coccinea</i> Scarlet Ammannia	Lythraceae	G5	<u>SH</u>				Garf, Phil	S
<i>Amorpha canescens</i> Lead Plant	Fabaceae	G5	SH				Cart, Rose	P
<i>Antennaria densifolia</i> Dense-leaved Antennaria	Asteraceae	G3	S1		S		Deer, Gran	D
<i>Aquilegia brevistyla</i> Short-styled Columbine	Ranunculaceae	G5	S2		S		Judi, Swee	D
<i>Aquilegia formosa</i> Sitka Columbine	Ranunculaceae	G5	S1				Beav	P
<i>Arabis demissa</i> var <i>languida</i> Daggett Rock Cress	Brassicaceae	G5T4	S1			W	Carb	P
<i>Arabis fecunda</i> Sapphire Rockcress	Brassicaceae	G2	S2		S	S	Beav, Rava, Silv	SE
<i>Arabis lyrata</i> var <i>kamchatica</i> Lyre-leaf Rockcress	Brassicaceae	G5T5?	S1				Flat	P
<i>Arctostaphylos patula</i> Green-leaf Manzanita	Ericaceae	G4	S1				Lake, Sand	D
<i>Asclepias incarnata</i> Swamp Milkweed	Asclepiadaceae	G5	S1				Carb, Fall	P

Scientific Name Common Name	Family	Global Rank	State Rank	FWS Status	FS Status	BLM Status	County Distribution	Range Notes
<i>Asclepias ovalifolia</i> Ovalleaf Milkweed	Asclepiadaceae	G5?	S1		S	W	Cart	P
<i>Asclepias stenophylla</i> Narrowleaf Milkweed	Asclepiadaceae	G4G5	S1			W	Cart, Rose	P
<i>Asplenium trichomanes</i> Maidenhair Spleenwort	Aspleniaceae	G5	SX				Flat	S
<i>Aster frondosus</i> Alkali Aster	Asteraceae	G4	S1				Sand	P
<i>Aster glaucodes</i> Gray Aster	Asteraceae	G4G5	S1				Carb	P
<i>Astragalus aretioides</i> Sweetwater Milkvetch	Fabaceae	G4	S2			W	BigH, Carb	RE
<i>Astragalus barrii</i> Barr's Milkvetch	Fabaceae	G3	S3		S	W	BigH, Cart, Powd, Rose	RE
<i>Astragalus ceramicus</i> var <i>apus</i> Painted Milkvetch	Fabaceae	G4T3	S1			S	Beav	RE
<i>Astragalus convallarius</i> var <i>convallarius</i> Lesser Rushy Milkvetch	Fabaceae	G5T5	S2			W	Beav, Broa, Jeff, Lewi	P
<i>Astragalus geyeri</i> var <i>geyeri</i> Geyer's Milkvetch	Fabaceae	<u>G4?T4?</u>	S2			S	Carb, Cust, Daws, Garf	D
<i>Astragalus grayi</i> Gray's Milkvetch	Fabaceae	G4?	S1				Carb	RE
<u><i>Astragalus lackschewitzii</i></u> Lackschewitz' Milkvetch	Fabaceae	<u>G2</u>	<u>S2</u>		S		Teto	RE
<i>Astragalus oreganus</i> Wind River Milkvetch	Fabaceae	G4?	S1			W	Carb	RE
<i>Astragalus racemosus</i> var <i>longisetus</i> Raceme Milkvetch	Fabaceae	G5T4	<u>S2</u>			W	Cart, Fall	P
<i>Astragalus scaphoides</i> Bitterroot Milkvetch	Fabaceae	G3	S2		S	S	Beav	RE
<i>Astragalus terminalis</i> Railhead Milkvetch	Fabaceae	<u>G3</u>	S2			S	Beav, Madi	RE
<i>Athysanus pusillus</i> Sandweed	Brassicaceae	G4	S1		S		Rava	P
<i>Atriplex truncata</i> Wedge-leaved Saltbush	Chenopodiaceae	G5	<u>SH</u>			W	Beav, Lake, Lewi	S
<i>Bacopa rotundifolia</i> Roundleaf Water-hyssop	Scrophulariaceae	G5	S1			W	Casc, Ferg, Garf, Phil	S
<u><i>Balsamorhiza hookeri</i></u> Hooker's Balsam-root	Asteraceae	<u>G5</u>	<u>S1</u>				Beav	P

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<i>Balsamorhiza macrophylla</i> Large-leafed Balsamroot	Asteraceae	G3G5	S1		S	W	Beav, Gall, Madi	P
<i>Bidens beckii</i> Beck Water-marigold	Asteraceae	G4	S2		S		Flat, Lake, Linc, Miss	P
<i>Boisduvalia densiflora</i> Dense Spike-primrose	Onagraceae	G5	SH				Sand	P
<i>Botrychium ascendens</i> Upward-lobed Moonwort	Ophioglossaceae	G3	S1		S		Flat, Lewi, Linc	S
<i>Botrychium campestre</i> Prairie Dunewort	Ophioglossaceae	G3	S1				Flat	S
<i>Botrychium crenulatum</i> Wavy Moonwort	Ophioglossaceae	G3	S2		S		Flat, Gran, Lake, Linc, Miss, Sand	S
<i>Botrychium hesperium</i> Western Moonwort	Ophioglossaceae	G3	<u>S2</u>		S		Deer, Flat, Glac	S
<i>Botrychium lineare</i> Linearleaf Moonwort	Ophioglossaceae	G1	S1				Glac, Lake	S
<i>Botrychium montanum</i> Mountain Moonwort	Ophioglossaceae	G3	S3		S		Flat, Lake, Linc, Miss, Sand	S
<i>Botrychium pallidum</i> Pale Moonwort	Ophioglossaceae	<u>G2</u>	<u>S1</u>				Flat	S
<i>Botrychium paradoxum</i> Peculiar Moonwort	Ophioglossaceae	G2	<u>S2</u>		S		Deer, Flat, Glac, Gran, Jeff, Lake, Linc, Pond, Teto	S
<i>Botrychium pedunculatum</i> Stalked Moonwort	Ophioglossaceae	<u>G2?</u>	S1		S		Flat, Linc	S
<i>Botrychium spathulatum</i> Spoon-leaf Moonwort	Ophioglossaceae	G3G4	S1				Lake	S
<i>Brasenia schreberi</i> Watershield	Cabombaceae	G5	S2		S		Flat, Lake, Linc, Miss	S
<i>Braya humilis</i> Low Braya	Brassicaceae	G4	S1				Beav	S
<i>Calochortus bruneauensis</i> Bruneau Mariposa Lily	Liliaceae	G5	SH				Beav	P
<i>Camissonia andina</i> Obscure Evening-primRose	Onagraceae	G4	S1			S	Carb, Miss, Rava	P
<i>Camissonia parvula</i> Small Camissonia	Onagraceae	G4	S1			S	Carb	P
<i>Cardamine oligosperma</i> var <i>kamtschatica</i> Few-seeded Bittercress	Brassicaceae	G5T?	S1				Flat	P
<i>Carex amplifolia</i> Big-leaf Sedge	Cyperaceae	G4	S1		S		Sand	P

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<i>Carex chordorrhiza</i> Creeping Sedge	Cyperaceae	G5	S2		S		Flat, Linc, Powe	P
<i>Carex comosa</i> Bristly Sedge	Cyperaceae	G5	S1				Flat	S
<i>Carex crawei</i> Craw's Sedge	Cyperaceae	G5	S2			S	Casc, Pond, Powe, Prai, Teto	S
<i>Carex gravida</i> var <i>gravida</i> Pregnant Sedge	Cyperaceae	G5T?	S1		S	W	BigH, Powd, Rose	P
<i>Carex incurviformis</i> var <i>incurviformis</i> Maritime Sedge	Cyperaceae	G4G5T?	S1				Deer, Glac, Teto	S
<i>Carex lenticularis</i> var <i>dolia</i> Goose-grass Sedge	Cyperaceae	G5T3Q	<u>S2</u>				Flat, Glac	RE
<i>Carex livida</i> Pale Sedge	Cyperaceae	G5	S3		S		Flat, Glac, Lake, Lewi, Miss, Powe, Teto	P
<i>Carex multicosata</i> Many-ribbed Sedge	Cyperaceae	G5	S1			W	Beav, Gall, Park	P
<i>Carex norvegica</i> ssp <i>inserrulata</i> Toothed Scandinavian Sedge	Cyperaceae	G5T?Q	S1				Carb, Park, Stil	D
<i>Carex norvegica</i> ssp <i>stevenii</i> Steven's Scandinavian Sedge	Cyperaceae	G5T?	S1				Deer	P
<i>Carex occidentalis</i> Western Sedge	Cyperaceae	G4	SH			W	Beav	P
<i>Carex pallescens</i> Palish Sedge	Cyperaceae	<u>G5</u>	<u>S1</u>				Rava	D
<i>Carex parryana</i> ssp <i>idaho</i> Idaho Sedge	Cyperaceae	G4T2	S2		S	S	Beav, Gall, Madi, Powe, Silv	RE
<i>Carex paupercula</i> Poor Sedge	Cyperaceae	G5	S3		S		Flat, Lake, Linc, Miss, Rava, Teto	P
<i>Carex petricosa</i> Rock Sedge	Cyperaceae	G4	S1				Glac	P
<i>Carex prairea</i> Prairie Sedge	Cyperaceae	G5?	S1		S		Flat, Linc	P
<i>Carex rostrata</i> Beaked Sedge	Cyperaceae	G5	S1		S		Flat, Linc, Miss	P
<i>Carex scoparia</i> Pointed Broom Sedge	Cyperaceae	G5	<u>S2</u>				Miss, Rava	S
<i>Carex stenoptila</i> Small-winged Sedge	Cyperaceae	G3?	<u>S2</u>				Flat, Rava, YNPK	S
<i>Carex sychnocephala</i> Many-headed Sedge	Cyperaceae	G4	S1				Casc, Glac, Lake, Linc, Sher	S

MTNHP Vascular Plant Species of Special Concern, March 1999

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<i>Carex tenuiflora</i> Thin-flowered Sedge	Cyperaceae	G5	S1				Flat	P
<i>Carex tinctoria</i> Slender Sedge	Cyperaceae	G4G5	SU				Glac, Lake, Park	P
<i>Carex vaginata</i> Sheathed Sedge	Cyperaceae	G5	S1		S		Linc	P
<i>Castilleja coccinea</i> Deer Indian Paintbrush	Scrophulariaceae	G3G4	S1				Flat, Miss, Powe	RE
<i>Castilleja coccinea</i> Coville Indian Paintbrush	Scrophulariaceae	G3G4	S2		S		Rava	RE
<i>Castilleja exilis</i> Annual Indian Paintbrush	Scrophulariaceae	G5	S2				Broa, Deer, Gall, Jeff, Madi, Park	P
<i>Castilleja gracillima</i> Slender Indian Paintbrush	Scrophulariaceae	G3G4	S2		S	W	Gall, Madi, Park, YNPK	RE
<i>Ceanothus herbaceus</i> var <i>pubescens</i> New Jersey Tea	Rhamnaceae	G5T?	SH			W	Powd	P
<i>Celastrus scandens</i> Bittersweet	Celastraceae	G5	S1			W	Daws	P
<i>Centaurium exaltatum</i> Western Centaury	Gentianaceae	G5	SH				BigH	S
<i>Centunculus minimus</i> Chaffweed	Primulaceae	G5	S1			W	Casc, Lake, Miss, Rava	S
<i>Cercocarpus montanus</i> var <i>glaber</i> Birchleaf Mountain-mahogany	Rosaceae	G5TU	S1			W	Trea	P
<i>Chenopodium subglabrum</i> Smooth Goosefoot	Chenopodiaceae	G3G4	S1			W	Cart, Casc, Cust	RE?
<i>Chrysosplenium tetrandrum</i> Northern Golden-carpet	Saxifragaceae	G5	S3				Gran, Rava	P
<i>Chrysothamnus parryi</i> ssp <i>montanus</i> Parry's Mountain Rabbitbrush	Asteraceae	G5T1	S1			W	Beav	RE
<i>Cirsium brevistylum</i> Short-styled Thistle	Asteraceae	G4	S2				Flat, Mine, Sand	P
<i>Cirsium longistylum</i> Long-styled Thistle	Asteraceae	G2Q	S2		S		Broa, Casc, Jeff, Judi, Lewi, Meag, Whea	SE
<i>Clarkia rhomboidea</i> Common Clarkia	Onagraceae	G4	S2		S		Linc, Sand	P
<i>Claytonia arenicola</i> Sand Springbeauty	Portulacaceae	G4	S1		S		Sand	P
<i>Cleome lutea</i> Yellow Bee Plant	Capparaceae	G5	S1			W	BigH, Carb	P

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<i>Collomia tinctoria</i> Yellow-staining Collomia	Polemoniaceae	G5	S1				Casc, Flat, Lake, Rava	P
<i>Corydalis sempervirens</i> Pale Corydalis	Fumariaceae	G4G5	S1				Flat, Glac, Linc	P
<i>Cryptantha fendleri</i> Fendler Cat's-eye	Boraginaceae	G4	S1			W	Beav, Sher	S
<i>Cryptantha scoparia</i> Miner's Candle	Boraginaceae	<u>G3</u>	S1			S	Carb	D
<i>Cyperus acuminatus</i> Short-pointed Flatsedge	Cyperaceae	G5	S1			W	Casc, Sand	S
<i>Cyperus erythrorhizos</i> Red-root Flatsedge	Cyperaceae	G5	SH				Flat, Miss	S
<i>Cyperus rivularis</i> Shining Flatsedge	Cyperaceae	G5	S1				Miss, Rava	S
<i>Cyperus schweinitzii</i> Schweinitz' Flatsedge	Cyperaceae	G5	<u>S2</u>			W	Cart, Casc, Cust, Sher	P
<i>Cypripedium fasciculatum</i> Clustered Lady's-slipper	Orchidaceae	G4	S2		S		Lake, Mine, Sand	P
<i>Cypripedium parviflorum</i> Small Yellow Lady's-slipper	Orchidaceae	G5	<u>S3</u>		S	W	Flat, Gall, Gran, Judi, Lake, Lewi, Linc, Miss, Park, Stil, Swee, Teto	S
<i>Cypripedium passerinum</i> Sparrow's-egg Lady's-slipper	Orchidaceae	G4G5	S2		S		Flat, Lake, Lewi, Linc, Pond, Powe, Teto	P
<i>Cystopteris montana</i> Mountain Bladder Fern	Dryopteridaceae	G5	SH				Glac	P
<i>Dalea enneandra</i> Nine-anther Dalea	Fabaceae	G5	S1			W	Cust, Rich	P
<i>Dalea villosa</i> var <i>villosa</i> Silky Prairie Clover	Fabaceae	G5T?	S1			W	Cart, Rich, Sher	P
<i>Dichanthelium oligosanthes</i> var <i>scribnerianum</i> Scribner's Panic Grass	Poaceae	G5T5	S1			W	Lake, Powd	S
<i>Downingia laeta</i> Great Basin Downingia	Campanulaceae	G5	S1			W	Beav, Lewi, Teto	S
<i>Draba densifolia</i> Dense-leaf Draba	Brassicaceae	G5	S2				Flat, Glac, Jeff, Lewi, Park, Pond, Silv	S
<i>Draba fladnizensis</i> White Arctic Draba	Brassicaceae	G4	S1				Carb, Deer, Madi, Stil	S
<i>Draba globosa</i> Round-fruited Draba	Brassicaceae	<u>G3</u>	S1			W	Beav, Madi	RE
<i>Draba macounii</i> Macoun's Draba	Brassicaceae	<u>G3G4</u>	S1				Flat, Glac	P

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<i>Draba porsildii</i> Porsild's Draba	Brassicaceae	G3G4	S1				Carb	D
<i>Draba ventosa</i> Wind River Draba	Brassicaceae	G3	S1				Beav, Madi	S
<i>Drosera anglica</i> English Sundew	Droseraceae	G5	S2		S		Flat, Gall, Lake, Lewi, Linc, Madi, Miss, Powe, Rava, Sand	S
<i>Drosera linearis</i> Linear-leaved Sundew	Droseraceae	G4	S1		S		Flat, Lewi, Powe	P
<i>Dryas integrifolia</i> Entire-leaved Avens	Rosaceae	G5	S1				Ferg, Gold	P
<i>Dryopteris cristata</i> Buckler Fern	Dryopteridaceae	G5	S2		S		Flat, Lake, Linc, Miss, Rava	P
<i>Elatine brachysperma</i> Short-seeded Water-wort	Elatinaceae	G5	SU				Gall, Miss	S
<i>Elatine californica</i> California Waterwort	Elatinaceae	G5	SU				Casc, Lake	P
<i>Eleocharis rostellata</i> Beaked Spikerush	Cyperaceae	G5	S2		S	W	Carb, Flat, Lake, Madi, Sand, Teto	S
<i>Elodea longivaginata</i> Long Sheath Waterweed	Hydrocharitaceae	G4G5	S1			W	Glac, Libe, Phil	S
<i>Elymus flavescens</i> Sand Wildrye	Poaceae	G4	S1			S	Beav	P
<i>Elymus innovatus</i> Northern Wild-rye	Poaceae	G5	S1		S		Casc, Glac, Pond	P
<i>Epipactis gigantea</i> Giant Helleborine	Orchidaceae	G4	S2		S	W	Carb, Casc, Flat, Gran, Lake, Madi, Powe, Teto	S
<i>Erigeron asperugineus</i> Idaho Fleabane	Asteraceae	G4	S1		S	W	Beav, Madi, Rava	RE
<i>Erigeron eatonii</i> ssp <i>eatonii</i> Eaton's Daisy	Asteraceae	G5T5	S1				Flat, Swee	P
<i>Erigeron evermannii</i> Evermann Fleabane	Asteraceae	G4	S1		S		Rava	RE
<i>Erigeron formosissimus</i> var <i>viscidus</i> Beautiful Fleabane	Asteraceae	G5T4	S1			W	Carb, Deer, Madi, Park, Rava	D
<i>Erigeron lackschewitzii</i> Lackschewitz' Fleabane	Asteraceae	G3Q	S3		S		Flat, Lewi, Pond, Teto	RE
<i>Erigeron leiomerus</i> Smooth Fleabane	Asteraceae	G4	S1				Beav, Madi	P
<i>Erigeron linearis</i> Linearleaf Fleabane	Asteraceae	G5	S1				Beav, Lewi, Rava	P

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<i>Erigeron tener</i> Slender Fleabane	Asteraceae	G4	S1				Beav	P
<i>Eriogonum caespitosum</i> Mat Buckwheat	Polygonaceae	G5	S1				Beav	P
<i>Eriogonum salsuginosum</i> Smooth Buckwheat	Polygonaceae	G4?	S1			S	Carb	P
<i>Eriogonum visherii</i> Visher's Buckwheat	Polygonaceae	G3	S1				Cart	RE
<i>Eriophorum callitrix</i> Sheathed Cotton-grass	Cyperaceae	G5	S1				Carb	S
<i>Eriophorum gracile</i> Slender Cottongrass	Cyperaceae	G5	S2		S		Flat, Lake, Linc, Madi	P
<i>Eupatorium maculatum</i> var <i>bruneri</i> Joe-pye Weed	Asteraceae	G5TU	S1			W	BigH, Carb	P
<i>Eupatorium occidentale</i> Western Boneset	Asteraceae	G4	S2		S		Mine, Rava	P
<i>Euphrasia arctica</i> var <i>disjuncta</i> Disjunct Eyebright	Scrophulariaceae	G5	S1				Glac	P
<i>Eustoma grandiflorum</i> Showy Prairie-gentian	Gentianaceae	G5	S1			W	McCo	D
<i>Festuca vivipara</i> Viviparous Fescue	Poaceae	G4G5Q	S2				Flat, Glac	P
<i>Gentiana glauca</i> Glaucous Gentian	Gentianaceae	G4G5	S1				Flat	P
<i>Gentianopsis macounii</i> Macoun's Gentian	Gentianaceae	G5	S1		S	W	Glac, Teto	P
<i>Gentianopsis simplex</i> Hiker's Gentian	Gentianaceae	G4	S1		S	W	Beav, Carb, Miss	P
<i>Glossopetalon nevadense</i> Spiny Greenbush	Crossosomataceae	G5?Q	S1		S		Rava	P
<i>Goodyera repens</i> Northern Rattlesnake-plantain	Orchidaceae	G5	S3		S		Ferg, Flat, Judi, Meag, Whea	S
<i>Gratiola ebracteata</i> Bractless Hedge-hyssop	Scrophulariaceae	G4	S1				Casc, Glac, Teto, Yell	S
<i>Grayia spinosa</i> Spiny Hopsage	Chenopodiaceae	G5	S2			W	Beav, BigH, Carb	P
<i>Grindelia howellii</i> Howell's Gum-weed	Asteraceae	G3	S2S3		S		Miss, Powe	RE
<i>Gymnosteris parvula</i> Small-flower Gymnosteris	Polemoniaceae	G4	SH				Gall	P

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<i>Halimolobos perplexa</i> var <i>lemhiensis</i> Puzzling Rockcress	Brassicaceae	G4T4	S1		S		Rava	SE
<i>Haplopappus aberrans</i> Idaho Golden-weed	Asteraceae	G3	S1		S		Rava	RE
<i>Haplopappus carthamoides</i> var <i>subsquarrosus</i> Beartooth Large-flowered Goldenweed	Asteraceae	G4G5T2T3	S2		S	W	Carb	RE
<i>Haplopappus macronema</i> var <i>macronema</i> Discoid Goldenweed	Asteraceae	G4G5T4	S1		S		Beav, Gall	P
<i>Haplopappus nanus</i> Dwarf Goldenweed	Asteraceae	G5	S1				Beav	P
<i>Haplopappus pygmaeus</i> Pygmy Goldenweed	Asteraceae	G4	SH				Deer, Gall	P
<i>Hemicarpha drummondii</i> Drummond's Hemicarpha	Cyperaceae	G4G5	SH				Carb	P
<i>Heteranthera dubia</i> Water Star-grass	Pontederiaceae	G5	S1		S		Flat, Sand	S
<i>Heterocodon rariflorum</i> Western Pearl-flower	Campanulaceae	G5	S1		S		Lake, Rava, Sand	S
<i>Howellia aquatilis</i> Water Howellia	Campanulaceae	G2	S2	LT	LT		Lake, Miss	S
<i>Hutchinsia procumbens</i> Hutchinsia	Brassicaceae	G5	S1			W	Beav, Carb, Powe	P
<i>Idahoia scapigera</i> Scalepod	Brassicaceae	G5	S1		S		Rava	P
<i>Ipomopsis congesta</i> ssp <i>crebrifolia</i> Ballhead Gilia	Polemoniaceae	G5T4?	S2				Beav	RE
<i>Ipomopsis minutiflora</i> Small-flower Standing-cypress	Polemoniaceae	G2G3	S1				Rava	D
<i>Juncus acuminatus</i> Tapered Rush	Juncaceae	G5	S1				Teto	S
<i>Juncus albescens</i> Three-flowered Rush	Juncaceae	G5	S2				Flat, Glac	S
<i>Juncus covillei</i> var <i>covillei</i> Coville's Rush	Juncaceae	G4G5T5	<u>S1</u>				Mine, Miss, Rava	P
<i>Juncus covillei</i> var <i>obtusatus</i> Coville's Blunt Rush	Juncaceae	G4G5T4	<u>S1</u>				Rava	P
<i>Juncus hallii</i> Hall's Rush	Juncaceae	G4G5	S2		S		Beav, Madi, Meag, Powe, Silv	P
<i>Kalmia polifolia</i> Pale Laurel	Ericaceae	G5	S1		S		Flat, Miss	P

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<i>Kelloggia galioides</i> Kelloggia	Rubiaceae	G5	S1				Mine	P
<i>Kobresia macrocarpa</i> Large-fruited Kobresia	Cyperaceae	G5	S1				Carb	P
<i>Kobresia simpliciuscula</i> Simple Kobresia	Cyperaceae	G5	S2				Beav, Glac, Gran, Park, Teto	S
<i>Kochia americana</i> Red Sage	Chenopodiaceae	G5	<u>S1</u>				Beav	P
<i>Koenigia islandica</i> Island Koenigia	Polygonaceae	G4	S1				Carb	D
<i>Lagophylla ramosissima</i> Slender Hareleaf	Asteraceae	G5	S1				Lake, Sand	P
<i>Lathyrus bijugatus</i> Latah Tule Pea	Fabaceae	G4	S1		S		Flat, Linc	RE
<i>Leptodactylon caespitosum</i> Leptodactylon	Polemoniaceae	G3G4	<u>S2</u>			W	Carb	P
<i>Lesquerella carinata</i> var <i>languida</i> Garnet Bladderpod	Brassicaceae	G3G4T1	S1			S	Gran	SE
<i>Lesquerella humilis</i> Bitterroot Bladderpod	Brassicaceae	G1	S1		S		Rava	SE
<i>Lesquerella lesicii</i> Lesica's Bladderpod	Brassicaceae	G1	S1			S	Carb	SE
<i>Lesquerella paysonii</i> Payson Bladderpod	Brassicaceae	G3	S1		S		Beav, Gran	RE
<i>Lesquerella pulchella</i> Beautiful Bladderpod	Brassicaceae	G2	S2		S	S	Beav	SE
<i>Lewisia columbiana</i> var <i>wallowensis</i> Columbia Lewisia	Portulacaceae	G4T4	S1				Rava	RE
<i>Lewisia pygmaea</i> var <i>nevadensis</i> Nevada Bitterroot	Portulacaceae	G4	S1				Beav, Deer, Rava	P
<i>Lilaea scilloides</i> Flowering Quillwort	Juncaginaceae	<u>G5?</u>	S1				Lake	P
<i>Liparis loeselii</i> Loesel's Twayblade	Orchidaceae	<u>G5</u>	S1		S		Lake	P
<i>Lobelia spicata</i> Pale-spiked Lobelia	Campanulaceae	G5	<u>S1</u>				Rich, Sher	P
<i>Lomatium attenuatum</i> Taper-tip Desert-parsley	Apiaceae	<u>G3</u>	S2			S	Beav, Madi	RE
<i>Lomatium geyeri</i> Geyer's Biscuitroot	Apiaceae	G3G4	S1		S		Linc	RE

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<i>Lomatium nuttallii</i> Nuttall Desert-parsley	Apiaceae	G3G4	S1			W	BigH	P
<i>Lomatogonium rotatum</i> Felwort	Gentianaceae	G5	S1		S	W	Beav	S
<i>Lycopodium dendroideum</i> Treelike Clubmoss	Lycopodiaceae	G5	S1		S		Flat, Glac, Linc	P
<i>Lycopodium inundatum</i> Northern Bog Clubmoss	Lycopodiaceae	G5	S1		S		Flat, Miss	P
<i>Lycopodium lagopus</i> Running Pine	Lycopodiaceae	G5T?	S1				Glac	P
<i>Lycopodium sitchense</i> Alaskan Clubmoss	Lycopodiaceae	G5	S3		S		Glac, Flat, Linc, Miss, Rava	P
<i>Maianthemum canadense</i> var <i>interius</i> Wild Lily-of-the-Valley	Liliaceae	G5T4	SH				Cart	P
<i>Malacothrix torreyi</i> Desert Dandelion	Asteraceae	G4	S1			S	Carb	D
<i>Mentzelia montana</i> White-bract Stickleaf	Loasaceae	G4	SH				Cust	P
<i>Mentzelia nuda</i> Bractless Mentzelia	Loasaceae	G5	S1			W	Cust, Daws, Vall	P
<i>Mentzelia pumila</i> Dwarf Mentzelia	Loasaceae	G4	S2			W	Carb	P
<i>Mertensia bella</i> Oregon Bluebells	Boraginaceae	G4	S1		S		Miss	D
<i>Mimulus breviflorus</i> Short-flowered Monkeyflower	Scrophulariaceae	G4	S1				Flat	P
<i>Mimulus nanus</i> Dwarf Purple Monkeyflower	Scrophulariaceae	G5	S1				Gall, Rava	P
<i>Mimulus patulus</i> Washington Monkeyflower	Scrophulariaceae	G2Q	S1		S		Flat	D
<i>Mimulus primuloides</i> Primrose Monkeyflower	Scrophulariaceae	G4	S2		S		Beav, Rava	P
<i>Najas guadalupensis</i> Guadalupe Water-nymph	Najadaceae	G5	S1			W	Casc, Flat, Lake, Rava	P
<i>Nama densum</i> Nama	Hydrophyllaceae	G5	S1			S	Carb	P
<i>Nuttallanthus texanus</i> Blue Toadflax	Scrophulariaceae	G4G5	S1			W	Cart, Daws	P
<i>Nymphaea tetragona</i> Pygmy Water-lily	Nymphaeaceae	G5	S1				Flat, Lake, Miss	D

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<i>Oenothera pallida</i> var <i>idahoensis</i> Pale Evening-primrose	Onagraceae	G5T4Q	S1			S	Beav	RE
<i>Ophioglossum pusillum</i> Adder's Tongue	Ophioglossaceae	G5	S2		S		Flat, Lake, Linc, Miss	S
<i>Orogenia fusiformis</i> Tapered-root Orogenia	Apiaceae	G5	S2		S		Beav, Madi, Miss, Rava	P
<i>Oxytropis campestris</i> var <i>columbiana</i> Columbia Crazyweed	Fabaceae	G5T3	S1		S		Flat, Lake	RE
<i>Oxytropis deflexa</i> var <i>foliolosa</i> Pendent-pod Crazyweed	Fabaceae	G5T?	S1				Madi	S
<i>Oxytropis parryi</i> Parry's Crazyweed	Fabaceae	G5	S1				Beav	P
<i>Oxytropis podocarpa</i> Stalked-pod Crazyweed	Fabaceae	G4	S1		S		Glac, Teto	S
<i>Papaver kluanensis</i> Alpine Poppy	Papaveraceae	G3?Q	S1				Carb, Park, Swee	S
<i>Penstemon angustifolius</i> Narrowleaf Penstemon	Scrophulariaceae	G5	S2			W	Cart, Daws, Miss	P
<i>Penstemon attenuatus</i> var <i>militaris</i> Taper-leaved Beardtongue	Scrophulariaceae	G4T4	S1				Rava	RE
<i>Penstemon globosus</i> Globe Beardtongue	Scrophulariaceae	G4	S2				Gran	P
<i>Penstemon grandiflorus</i> Large Flowered Beardtongue	Scrophulariaceae	G5?	S1				Cust	P
<i>Penstemon lemhiensis</i> Lemhi Beardtongue	Scrophulariaceae	G3	S2		S	S	Beav, Deer, Rava, Silv	RE
<i>Penstemon payettensis</i> Payette Beardtongue	Scrophulariaceae	G4	S1		S		Rava	RE
<i>Penstemon whippleanus</i> Whipple's Beardtongue	Scrophulariaceae	G5	S1			S	Beav, Madi	P
<i>Petasites frigidus</i> var <i>nivalis</i> Palmate-leaved Coltsfoot	Asteraceae	G5T?	S1		S		Flat, Glac	P
<i>Phacelia incana</i> Hoary Phacelia	Hydrophyllaceae	G3	S2			W	Beav	P
<i>Phacelia scopulina</i> Dwarf Phacelia	Hydrophyllaceae	G4	SH			W	Madi, Silv	D
<i>Phacelia thermalis</i> Hot Spring Phacelia	Hydrophyllaceae	G3G4	S1			W	Ferg, Garf, Phil	D
<i>Phippsia algida</i> Ice Grass	Poaceae	G5	S2				Carb, Stil	D

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<i>Phlox andicola</i> Plains Phlox	Polemoniaceae	G4	<u>S2</u>			W	Cart, Daws, Rose, Sher	P
<i>Phlox kelseyi</i> var <i>missoulensis</i> Missoula Phlox	Polemoniaceae	G2	S2		S		Casc, Gran, Judi, Lewi, Meag, Miss, Powe	SE
<i>Physaria brassicoides</i> Double Bladderpod	Brassicaceae	G5	S1				Cart	RE
<i>Physaria didymocarpa</i> var <i>lanata</i> Woolly Twinpod	Brassicaceae	G5T2	SU				BigH	RE
<i>Plagiobothrys leptocladus</i> Slender-branched Popcorn-flower	Boraginaceae	G4	S1			W	Cust, Glac, Phil	D
<i>Poa curta</i> Short-leaved Bluegrass	Poaceae	G4	S1			W	Carb	P
<i>Poa laxa</i> ssp <i>banffiana</i> Banff Loose-flowered Bluegrass	Poaceae	G5?T1	<u>S1</u>				Glac	D
<i>Polygonum douglasii</i> ssp <i>austinae</i> Austin's Knotweed	Polygonaceae	G5T4	S2S3		S		Broa, Flat, Lewi, Madi, Pond, Teto	S
<i>Polystichum kruckebergii</i> Kruckeberg's Sword-fern	Dryopteridaceae	G4	S1				Deer, Flat, Lake, Miss	P
<i>Polystichum scopulinum</i> Mountain Holly-fern	Dryopteridaceae	G5	S1				Rava, Sand	P
<i>Potamogeton obtusifolius</i> Blunt-leaved Pondweed	Potamogetonaceae	G5	S2		S		Flat, Glac, Lake, Miss	P
<i>Potentilla brevifolia</i> Short-leaved Cinquefoil	Rosaceae	G4	S1				Madi	RE
<i>Potentilla hyparctica</i> Low Arctic Cinquefoil	Rosaceae	G4G5	S1				Carb	S
<i>Potentilla plattensis</i> Platte Cinquefoil	Rosaceae	G4	S1			W	Beav, BigH, Carb	S
<i>Potentilla quinquefolia</i> Five-leaf Cinquefoil	Rosaceae	G5T4	S2		S		Flat, Glac, Madi, Pond, Vall, YNPKKK	S
<i>Potentilla uniflora</i> One-flowered Cinquefoil	Rosaceae	G5	S1				Carb, Flat, Glac, Gran	S
<i>Primula alcalina</i> Idaho PrimRose	Primulaceae	G1	<u>SX</u>			W	Beav	RE
<i>Primula incana</i> Mealy PrimRose	Primulaceae	G4G5	S2			W	Beav, Broa, Carb, Deer, Gall, Jeff, Madi, Sher, Teto	P
<i>Prunus pumila</i> Sand Cherry	Rosaceae	G5	S1				Fall	P
<i>Psilocarphus brevissimus</i> var <i>brevissimus</i> Dwarf Woolly-heads	Asteraceae	G5T?	<u>S2</u>		S	W	Casc, Petr, Phil, Sand	S

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<i>Psoralea hypogaea</i> Little Indian Breadroot	Fabaceae	G5T4	S2			W	Cart, CACS, Chou, Ferg, Gold, Powd, Rose	P
<i>Puccinellia lemmonii</i> Lemmon's Alkaligrass	Poaceae	<u>G4</u>	<u>S1</u>				Beav	P
<i>Quercus macrocarpa</i> Bur Oak	Fagaceae	G5	S1			S	Cart	P
<i>Ranunculus cardiophyllus</i> Heart-leaved Buttercup	Ranunculaceae	G4G5	S2			W	Glac, Swee, Tool	S
<i>Ranunculus gelidus</i> Arctic Buttercup	Ranunculaceae	G4	S1				Stil	D
<i>Ranunculus hyperboreus</i> High-arctic Buttercup	Ranunculaceae	G5	S1				Deer, Gall	P
<i>Ranunculus jovis</i> Jove's Buttercup	Ranunculaceae	G4	S2		S		Beav, Gall, Madi, Park	RE
<i>Ranunculus orthorhynchus</i> var <i>platyphyllus</i> Straightbeak Buttercup	Ranunculaceae	G5T5	S1				Deer, Gran, Mine	P
<i>Ranunculus pedatifidus</i> Northern Buttercup	Ranunculaceae	G5	S1			W	Flat, Glac, Gran, Libe, Tool	S
<i>Ranunculus verecundus</i> Timberline Buttercup	Ranunculaceae	G5	S2				Deer, Flat, Glac, Madi	S
<i>Ribes cognatum</i> Shinyleaf Gooseberry	Grossulariaceae	G4Q	S1				Linc, Mine, Sand	RE
<i>Ribes laxiflorum</i> Trailing Black Currant	Grossulariaceae	<u>G5</u>	<u>S1</u>				Linc	D
<i>Ribes triste</i> Swamp Red Currant	Grossulariaceae	G5	S1				Deer, Gran, Mine, Rava	P
<i>Ribes velutinum</i> Desert Goosebery	Grossulariaceae	<u>G5</u>	<u>S1</u>				Beav	P
<i>Rorippa calycina</i> Persistent-sepal Yellow-cress	Brassicaceae	G3	S1			W	Casc, Chou, Cust, McCo, Yell	RE
<i>Rotala ramosior</i> Toothcup	Lythraceae	G5	S1				Lake, Miss, Rava	P
<i>Sagina nivalis</i> Arctic Pearlwort	Caryophyllaceae	G5	S1				Glac	D
<i>Salix barrattiana</i> Barratt's Willow	Salicaceae	G5	S1		S		Carb, Glac	S
<i>Salix serissima</i> Autumn Willow	Salicaceae	G4	S2			W	Glac, Meag, Teto	P
<i>Salix wolfii</i> var <i>wolfii</i> Wolf's Willow	Salicaceae	G5?T4	<u>S3</u>		S		Deer, Gall, Madi, Park, Rava, Swee	P

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<i>Satureja douglasii</i> Yerba Buena	Lamiaceae	G4	S2				Miss, Rava, Sand	P
<i>Saussurea densa</i> Dwarf Saw-wort	Asteraceae	G3G5	S2				Flat, Lewi, Pond, Teto	RE
<i>Saussurea weberi</i> Weber's Saw-wort	Asteraceae	G3Q	S1		S		Gran	D
<i>Saxifraga apetala</i> Tiny Swamp Saxifrage	Saxifragaceae	G3Q	S2				Beav, Carb	RE
<i>Saxifraga hirculus</i> Yellow Marsh Saxifrage	Saxifragaceae	G5	S1				Carb	S
<i>Saxifraga tempestiva</i> Storm Saxifrage	Saxifragaceae	G2	S2		S		Beav, Deer, Gran, Madi, Rava	SE
<i>Scheuchzeria palustris</i> Pod Grass	Scheuchzeriaceae	G5	S2		S		Flat, Lake, Linc, Miss	P
<i>Scirpus cespitosus</i> Tufted Club-rush	Cyperaceae	G5	S2		S		Beav, Flat, Linc, Powe, Teto	S
<i>Scirpus heterochaetus</i> Slender Bulrush	Cyperaceae	G5	S1				Sher	S
<i>Scirpus hudsonianus</i> Hudson's Bay Bulrush	Cyperaceae	G5	S1				Flat, Glac	P
<i>Scirpus pumilus ssp rollandii</i> Small Clubrush	Cyperaceae	G3Q	S1				Glac, Teto	P
<i>Scirpus subterminalis</i> Water Bulrush	Cyperaceae	G4G5	S2		S		Flat, Lewi, Linc, Miss	S
<i>Selaginella selaginoides</i> Low Spike-moss	Selaginellaceae	G5	S2				Beav, Deer, Gran, Madi	S
<i>Senecio amplexans var holmii</i> Clasping Groundsel	Asteraceae	G4T?	S1				Carb	P
<i>Senecio eremophilus var eremophilus</i> Desert Groundsel	Asteraceae	G5T5	S1				BigH, Hill, Park	S
<i>Senecio pauciflorus</i> Few-flowered Butterweed	Asteraceae	G4G5	S1				Flat	P
<i>Shoshonea pulvinata</i> Shoshonea	Apiaceae	G2G3	S1		S	S	Carb	RE
<i>Sidalcea oregana</i> Oregon Checker-mallow	Malvaceae	G5	S1				Gall, Lake	P
<i>Silene spaldingii</i> Spalding's Champion	Caryophyllaceae	G2	S1	P			Flat, Lake, Linc, Sand	RE
<i>Sisyrinchium septentrionale</i> Blue-eyed Grass	Iridaceae	G3G4	S1				Sher	P

Scientific Name Common Name	Family	Global Rank	State Rank	FWS Status	FS Status	BLM Status	County Distribution	Range Notes
<i>Solidago ptarmicoides</i> Prairie Aster	Asteraceae	G5	S1				Cart, Rich	P
<i>Solidago sparsiflora</i> Few-flowered Goldenrod	Asteraceae	G?	S1			W	Garf, Stil	S
<i>Sphaeralcea munroana</i> White-stemmed Globe-mallow	Malvaceae	G4	S1				Beav	P
<i>Sphaeromeria argentea</i> Chicken Sage	Asteraceae	G3?	S2			S	Beav	P
<i>Sphenopholis intermedia</i> Slender Wedgegrass	Poaceae	G5	SH			W	Gall	P
<i>Spiranthes diluvialis</i> Ute Ladies' Tresses	Orchidaceae	G2	<u>S2</u>	LT		W	Beav, Gall, Jeff, Madi	S
<i>Sporobolus asper</i> Longleaf Dropseed	Poaceae	G5	SH			W	Cart, Cust	P
<i>Sporobolus neglectus</i> Small Dropseed	Poaceae	G5	SU			W	Gall, Sand, Whea	P
<i>Stellaria crassifolia</i> Fleshy Stitchwort	Caryophyllaceae	G5	S1			W	Beav, Carb, Deer, Sand	P
<i>Stellaria jamesiana</i> James Stitchwort	Caryophyllaceae	G5	S1			W	Beav	P
<i>Stephanomeria spinosa</i> Spiny Skeletonweed	Asteraceae	G4	S1			W	Beav, Madi	P
<i>Stipa lettermanii</i> Letterman's Needlegrass	Poaceae	G5	S1				BigH, Madi	P
<i>Suckleya suckleyana</i> Poison Suckleya	Chenopodiaceae	G5	SU				Muss, Roos, Vall	P
<i>Sullivantia hapemanii</i> var <i>hapemanii</i> Wyoming Sullivantia	Saxifragaceae	G3T3	<u>S2</u>			W	BigH, Carb	RE
<i>Taraxacum eriophorum</i> Rocky Mountain Dandelion	Asteraceae	G4	<u>S2</u>			S	Beav, Gran, Madi	S
<i>Thalictrum alpinum</i> Alpine Meadowrue	Ranunculaceae	G5	<u>S2</u>		S	S	Beav, Deer, Gran	S
<i>Thelypodium paniculatum</i> Northwestern Thelypody	Brassicaceae	<u>G2G3</u>	SH			S	Beav	RE
<i>Thelypodium sagittatum</i> ssp <i>sagittatum</i> Slender Thelypody	Brassicaceae	G4T?	S2				Beav, Flat, Gall, Lake	P
<i>Thelypteris phegopteris</i> Northern Beechfern	Thelypteridaceae	G5	S2		S		Flat, Glac, Linc, Sand	P
<i>Thlaspi parviflorum</i> Small-flowered Pennycress	Brassicaceae	G3	S2		S		Beav, Carb, Madi, Park, Silv	RE

MTNHP Vascular Plant Species of Special Concern, March 1999

Scientific Name Common Name	Family	Global Rank	State Rank	FWS Status	FS Status	BLM Status	County Distribution	Range Notes
<i>Tofieldia pusilla</i> Small Tofieldia	Liliaceae	G5	S2				Glac	P
<i>Townsendia condensata</i> Cushion Townsendia	Asteraceae	G4	S2			W	Beav, Glac, Madi, Park	RE
<i>Townsendia florifer</i> Showy Townsendia	Asteraceae	G5	S1			W	Beav, Madi	P
<i>Trifolium cyathiferum</i> Cup Clover	Fabaceae	G4	S1				Miss, Rava	P
<i>Trifolium eriocephalum ssp arcuatum</i> Woolly-head Clover	Fabaceae	G4T3?	<u>S2</u>		S		Rava	P
<i>Trifolium gymnocarpon</i> Hollyleaf Clover	Fabaceae	G4	S2		S		Gran, Rava	P
<i>Utricularia intermedia</i> Flat-leaved Bladderwort	Lentibulariaceae	G5	S1		S		Flat, Miss, Powe	P
<i>Vaccinium myrtilloides</i> Velvetleaf Blueberry	Ericaceae	G5	S1				Flat	P
<i>Veratrum californicum</i> California False-hellebore	Liliaceae	G5	S1		S	W	Gran	P
<i>Viburnum lentago</i> Nannyberry	Caprifoliaceae	G5	S1				BigH, Roos	P
<i>Viguiera multiflora</i> Many-flowered Viguiera	Asteraceae	G4G5	<u>S1</u>				Beav, Gall, Madi	P
<i>Viola renifolia</i> Kidney-leaf White Violet	Violaceae	G5	S3		S	W	Flat, Glac, Jeff, Lake, Linc, Miss, Silv, Teto	S
<i>Waldsteinia idahoensis</i> Idaho Barren Strawberry	Rosaceae	G3	S1		S		Miss	RE
<i>Wolffia columbiana</i> Columbia Water-meal	Lemnaceae	G5	S2			W	Flat, Lake, Miss, Rava	S
<i>Zizia aurea</i> Golden Alexanders	Apiaceae	G5	SH				Jeff	P

Watch Vascular Plant List, March 1999

The Watch Vascular Plant List is made up of two sets of species:

Limited distribution species (43 total) are species of biogeographic interest. They include species that are state endemics, and other species which are in highly restricted areas or habitats of the state. A process for compiling and presenting information on their distribution is under development.

Species of unresolved status (124 total) are species to evaluate for addition to the Montana Plant Species of Special Concern list in the future. The overriding status question fits into one of six cases revolving around taxonomy (taxonomic validity, resolving disputes of specimen identification), natural distribution (whether

there is a specimen voucher, whether or not it was brought into the state by humans), vulnerability as reflected in response to unnatural disturbance, and completion of base-level information compilation (accession records from major Montana herbaria, published sources and any needed consultation). We have also included a category for recurrent hybrids and for species new to science pending publications. A summary statement of their status is available upon request.

Collection label information and commentary are invited on any Watch List species, and MTNHP will continue evaluating their status. The scientific name and global rank of watch species are presented below.

Scientific Name	Global Rank	State Rank	Limited Distribution	Unresolved						Hybrid	Publication
				Native	Vulnerable	Compilation	Specimen	Report	Taxonomy		
<i>Achillea sibirica</i>	G5?	SU		•							
<i>Acorus americanus</i>	G5	SU						•			
<i>Agastache foeniculum</i>	G4G5	SU			•						
<i>Agoseris lackschewitzii</i>	G4	S3	•								
<i>Agrimonia gryposepala</i>	G5	SU			•						
<i>Agrostis borealis</i>	G5	SU			•						
<i>Amaranthus californicus</i>	G4	SA			•						
<i>Ambrosia acanthicarpa</i>	G5	S4			•						
<i>Ambrosia tomentosa</i>	G4	SU			•						
<i>Amsinckia lycopsoides</i>	G?	SA			•						
<i>Antennaria aromatica</i>	G4	S3S4	•								
<i>Antennaria neodioica ssp neodioica</i>	G4G5T?	SU					•				
<i>Antennaria pulcherrima</i>	G4G5	SU					•				
<i>Arabis sparsiflora var columbiana</i>	G5TU	SU						•			
<i>Arabis sparsiflora var subvillosa</i>	G5T?	SU						•			
<i>Artemisia longiloba</i>	G5T4	SR						•			
<i>Artemisia tilesii ssp unalaschcensis</i>	G5T3T4	SU					•				
<i>Aster foliaceus var lyallii</i>	G3?	SR				•					
<i>Aster simplex var ramosissimus</i>	G5T?	SU						•			
<i>Astragalus chamaeleuce</i>	G5	S3	•								
<i>Astragalus kentrophyta var kentrophyta</i>	G5T4	S3				•					
<i>Astragalus lentiginosus var salinus</i>	G5T5	S3	•								
<i>Astragalus leptaleus</i>	G4	S3	•								
<i>Astragalus miser var crispatus</i>	G5T3?	SU				•					
<i>Astragalus platytropis</i>	G5	S3	•								
<i>Astragalus racemosus var racemosus</i>	G5T5	SU					•				

Scientific Name	Global Rank	State Rank	Limited Distribution	Unresolved						Hybrid	Publication
				Native	Vulnerable	Compilation	Specimen	Report	Taxonomy		
<i>Bidens comosa</i>	G5	SU			•						
<i>Bidens frondosa</i>	G5	SU			•						
<i>Bidens vulgata</i> var <i>schizantha</i>	G5T?	SU			•						
<i>Botrychium minganense</i>	G4	S3	•								
<i>Botrychium</i> sp 2	G?	SU									•
<i>Botrychium</i> sp 3	G?	SU									•
<i>Botrychium</i> sp 4	G?	SU									•
<i>Botrychium</i> sp 5	G?	SU									•
<i>Botrychium</i> x <i>watertonense</i>	HYB	HYB								•	
<i>Calamagrostis koelerioides</i>	G5	SU		•							
<i>Calamagrostis scopulorum</i>	G5	SU					•				
<i>Calamagrostis tweedyi</i>	G2G3	S3	•								
<i>Camissonia tanacetifolia</i>	G5	SU						•			
<i>Cardamine rupicola</i>	G3	S3	•								
<i>Carex aenea</i>	G5	SU						•			
<i>Carex brunnescens</i>	G5	SU					•				
<i>Carex chalciolepis</i>	G5T?	SU				•					
<i>Carex ebenea</i>	G5	SU					•				
<i>Carex eburnea</i>	G5	SU			•						
<i>Carex jonesii</i>	G5	SU				•					
<i>Carex lacustris</i>	G5	SU				•					
<i>Carex luzulina</i> var <i>atropurpurea</i>	G5T3	SU							•		
<i>Carex microglochin</i>	G5?	SU						•			
<i>Carex misandra</i>	G5	S3			•						
<i>Carex nelsonii</i>	G3?	SU			•						
<i>Carex neurophora</i>	G4	S3			•						
<i>Carex pelocarpa</i>	G4?	SU						•			
<i>Carex stramineiformis</i>	G4	SU						•			
<i>Carex torreyi</i>	G4	S3			•						
<i>Castilleja crista-galli</i>	G3?	SU						•			
<i>Castilleja nivea</i>	G3	SU	•								
<i>Castilleja pilosa</i> var <i>longispica</i>	G4?T4	S3	•								
<i>Castilleja rustica</i>	G4G5T3T4	S3	•								
<i>Chrysothamnus linifolius</i>	G5	S3			•						
<i>Cirsium pulcherrimum</i>	G5	SU						•			
<i>Claytonia cordifolia</i>	G5	SU				•					
<i>Collomia debilis</i> var <i>camporum</i>	G5T3	SU				•					
<i>Conimitella williamsii</i>	G3	SU				•					
<i>Cordylanthus capitatus</i>	G4	SU						•			
<i>Cryptantha flavoculata</i>	G5	S3			•						
<i>Cryptantha humilis</i>	G4?	SU						•			
<i>Cryptogramma cascadiensis</i>	G5	SU				•					

Scientific Name	Global Rank	State Rank	Limited Distribution	Unresolved					Taxonomy	Hybrid	Publication
				Native	Vulnerable	Compilation	Specimen	Report			
<i>Cuscuta pentagona</i> var <i>pentagona</i>	G5T5	SU			•						
<i>Cymopterus hendersonii</i>	G5	S1							•		
<i>Cypripedium x columbianum</i>	HYB	HYB								•	
<i>Delphinium bicolor</i> ssp <i>calcicola</i>	G4G5T3	S3	•								
<i>Delphinium burkei</i>	G4	SU					•				
<i>Delphinium geyeri</i>	G5	SU							•		
<i>Draba daviesiae</i>	G3	S3	•								
<i>Draba lonchocarpa</i> var <i>exigua</i>	G4T3?	SU							•		
<i>Draba sp 1</i>	G3G4	S3	•								
<i>Elatine americana</i>	G4	SU			•						
<i>Eleocharis bella</i>	G5	SU							•		
<i>Eleocharis flavescens</i>	G5	SU						•			
<i>Eleocharis xyridiformis</i>	G4Q	SU							•		
<i>Equisetum x ferrissii</i>	HYB	HYB								•	
<i>Equisetum x trachyodon</i>	HYB	HYB								•	
<i>Erigeron allocotus</i>	G3	S3	•								
<i>Erigeron coulteri</i>	G5	SU			•						
<i>Erigeron flabellifolius</i>	G3	S3	•								
<i>Erigeron flagellaris</i>	G5	SU			•						
<i>Eriogonum capistratum</i> var <i>muhlickii</i>	G4T?	S3	•								
<i>Eriogonum chrysocephalum</i>	GUQ	SU							•		
<i>Eriogonum lagopus</i>	G3	S3	•								
<i>Eriogonum umbellatum</i> var <i>aureum</i>	G5TU	SU							•		
<i>Eriophorum scheuchzeri</i>	G5	SU						•			
<i>Eriophorum viridicarinarum</i>	G5	S3	•								
<i>Euthamia graminifolia</i>	G5	SU						•			
<i>Evax prolifera</i>	G5	SU			•						
<i>Floerkea proserpinacoides</i>	G5	SU				•					
<i>Galium cymosum</i>	G?	SU						•			
<i>Gentiana aquatica</i>	G4	S3	•								
<i>Gentiana prostrata</i>	G5	SU			•						
<i>Gentianella tenella</i>	G4G5	SU			•						
<i>Geum canadense</i>	G5	SU				•					
<i>Geum rossii</i> var <i>rossii</i>	G5T5	SU						•			
<i>Gilia inconspicua</i>	G5	S3	•								
<i>Gnaphalium purpureum</i> var <i>purpureum</i>	G5TU	SA		•							
<i>Grindelia nana</i> var <i>integrifolia</i>	G5T4	SU							•		
<i>Halenia deflexa</i> ssp <i>deflexa</i>	G5TU	S3			•						
<i>Halimolobos virgata</i>	G4	S3			•						
<i>Haplopappus multicaulis</i>	G4	S2S3	•								
<i>Helenium hoopesii</i>	G5	SU			•						
<i>Heterotheca villosa</i> var <i>depressa</i>	G5T3	SU						•			

Scientific Name	Global Rank	State Rank	Limited Distribution	Unresolved						Hybrid	Publication
				Native	Vulnerable	Compilation	Specimen	Report	Taxonomy		
<i>Hierochloe alpina</i>	G5	SU						•			
<i>Hierochloe odorata</i>	G5	S3				•					
<i>Huperzia haleakalae</i>	G4?	SU				•					
<i>Hymenopappus filifolius</i> var <i>idahoensis</i>	G5T4	SU					•				
<i>Hymenopappus filifolius</i> var <i>luteus</i>	G5T?	SU					•				
<i>Impatiens aurella</i>	G4?	SU			•						
<i>Impatiens ecalcarata</i>	G3G4	S3			•						
<i>Ipomopsis congesta</i> ssp <i>pseudotypica</i>	G5T?	S2S3	•								
<i>Isoetes lacustris</i>	G5	SU						•			
<i>Isoetes nuttallii</i>	G4?	SU						•			
<i>Juncus interior</i>	G4G5	SU					•				
<i>Juncus triglumis</i>	G5	SU			•						
<i>Juncus tweedyi</i>	G3Q	SU				•					
<i>Juncus vaseyi</i>	G5?	SU				•					
<i>Lemna minuta</i>	G4	SU			•						
<i>Lemna valdiviana</i>	G5	SU			•						
<i>Ligusticum porteri</i>	G4G5	SU						•			
<i>Ligusticum verticillatum</i>	G4G5	S2S3						•			
<i>Lilium columbianum</i>	G4G5	SU			•						
<i>Lilium philadelphicum</i>	G5	S3			•						
<i>Lobelia kalmii</i>	G5	SU				•					
<i>Lomatium farinosum</i>	G4G5	SU					•				
<i>Madia minima</i>	G4	S3			•						
<i>Mimulus suksdorfii</i>	G4	S3S4	•								
<i>Mirabilis hirsuta</i>	G5	S3			•						
<i>Muhlenbergia montana</i>	G5	SU						•			
<i>Myosotis verna</i>	G5	S3			•						
<i>Navarretia divaricata</i>	G5	SU						•			
<i>Oenothera elata</i> ssp <i>hirsutissima</i>	G5T?	SU					•				
<i>Oryzopsis contracta</i>	G3G4	S3	•								
<i>Oxalis stricta</i>	G5	SA		•							
<i>Oxytropis lagopus</i> var <i>conjugens</i>	G4T3	S3	•								
<i>Oxytropis nana</i> var <i>fallax</i>		SU			•						
<i>Papaver pygmaeum</i>	G3	S3	•								
<i>Pedicularis contorta</i> var <i>rubicunda</i>	G5T2	S3	•								
<i>Pediocactus simpsonii</i>	G4	S3	•								
<i>Penstemon caryi</i>	G3	S3	•								
<i>Penstemon flavescens</i>	G3	S3	•								
<i>Penstemon laricifolius</i>	G4	S3	•								
<i>Penstemon montanus</i> var <i>idahoensis</i>	G5T?	SU				•					
<i>Physalis hederifolia</i> var <i>comata</i>	G5?T4?	SU						•			
<i>Physalis pumila</i>	G5	SU		•							

Scientific Name	Global Rank	State Rank	Limited Distribution	Unresolved					Report	Specimen	Taxonomy	Hybrid	Publication
				Native	Vulnerable	Compliation							
<i>Physaria saximontana</i> var <i>dentata</i>	G3T3	S3	•										
<i>Platyschkuhria integrifolia</i> var <i>integrifolia</i>	G5T?	S4	•										
<i>Poa macroclada</i>	G3?Q	SU						•					
<i>Polygonum polygaloides</i>	G4G5	SU			•								
<i>Potentilla concinna</i> var <i>macounii</i>	G2?	SU						•					
<i>Rubus arcticus</i>	G5	SU			•								
<i>Salix petiolaris</i>	G5	SU						•					
<i>Saxifraga subapetala</i>	G3G4Q	SU				•							
<i>Scirpus pendulus</i>	G5	SU		•									
<i>Selaginella densa</i> var <i>standleyi</i>	G5TU	SU				•							
<i>Senecio congestus</i>	G5	SU			•								
<i>Senecio debilis</i>	G3G4	S3	•										
<i>Senecio hyperborealis</i>	G5	SU							•				
<i>Sparganium androcladum</i>	G4G5	SU		•									
<i>Sphaeromeria capitata</i>	G3	S2S3	•										
<i>Spiraea x pyramidata</i>	HYB	HYB										•	
<i>Sporobolus vaginiflorus</i>	G5	SU		•									
<i>Stanleya tomentosa</i>	G4	S3	•										
<i>Stipa lemmonii</i> var <i>lemmonii</i>	G5T?	SU						•					
<i>Stipa thurberiana</i>	G5	SA		•									
<i>Synthyris canbyi</i>	G3	S3	•										
<i>Synthyris missurica</i>	G4	S1	•										
<i>Teucrium canadense</i>	G5	SU			•								
<i>Thelesperma megapotamicum</i>	G5	SU		•									
<i>Tillaea aquatica</i>	G5	SU		•									
<i>Townsendia leptotes</i>	G4	SU											
<i>Townsendia nuttallii</i>	G3	S3	•										
<i>Townsendia spathulata</i>	G3	S3	•										
<i>Tradescantia bracteata</i>	G5	SU						•					
<i>Trisetum x orthochaetum</i>	HYB	HYB										•	
<i>Vaccinium ovalifolium</i>	G5	SU						•					
<i>Verbena bipinnatifida</i>	G5	SU						•					
<i>Vernonia fasciculata</i> ssp <i>corymbosa</i>	G5T?	SU						•					
<i>Viburnum opulus</i>	G5	SU		•									
<i>Viola palustris</i>	G5	SU						•					
<i>Viola pedatifida</i>	G5	SU						•					
<i>Viola septentrionalis</i>	G5	SU						•					

NONVASCULAR PLANT SPECIES OF SPECIAL CONCERN, MARCH 1999

Introduction

The following list of mosses is based on a state floristic compilation prepared for the U.S. Forest Service and subsequent evaluation (Elliot 1995). It includes species with highly specialized habitat requirements, species which have not been collected for over 70 years, and other species which have not been collected more than three times in the state, including the most recent additions to the state flora. Global ranking follows that for vascular plants (see pages 1 and 2), however, state rank definitions for mosses have been modified as follows:

State

Rank Definition

- S1 Potentially critical imperiled because of both species and habitat rarity (3 or fewer collections and highly restricted to rare habitat).
- S2 Potentially imperiled because of both species and habitat rarity (20 or fewer collections and highly restricted to rare habitat).
- SH Historically known only from records before 1925; may be rediscovered.
- SU Unknown (3 or fewer collections but collection label is incomplete or habitat restrictions and habitat rarity are poorly known to rank the species).

Work is still underway to enter location records for mosses based on existing collections. Major Montana bryophyte collections are available for reference at the University of Montana and the U.S. Forest Service's Intermountain Research Station Resource Center Herbarium in Missoula. Moss collectors are encouraged to use the Plant Species of Special Concern Survey Form when submitting information to MTNHP

Selected References

- Conrad, H. S. and P. L. Redfern. 1979. *How to know the mosses and liverworts*. Wm. C. Brown Co., Dubuque, Iowa. 302 pp.
- Elliot, J. C. 1995. Rare mosses, rare habitats. Unpublished report for the 1995 Montana Rare Plant Conference. Conservation Biology Research, Helena, MT. 17 pp.
- Lawton, E. 1971. Keys for the identification of the mosses of the Pacific Northwest (Reprinted from *Moss flora of the Pacific Northwest*). Hattori Botanical Lab., Nichinan, Japan. 66 pp.
- Schofield, W. B. 1992. *Some common mosses of British Columbia*. Royal British Columbia Museum, Victoria, B.C. Canada. 394 pp.
- Vitt, D. H., J. E. Marsh and R. B. Bovey. 1988. *Mosses, lichens and ferns of northwest North America*. Lone Pine Publishing, Edmonton, Alberta, Canada. 296 pp.

Scientific Name	Family	Global Rank	State Rank	FS Status	County Distribution
Bryophytes					
<i>Aloina brevirostris</i>	Pottiaceae	G3G5	SH		
<i>Amblyodon dealbatus</i>	Meesiaceae	G3G5	SH		
<i>Bartramia stricta</i>	Bartramiaceae	G?	S1		Glac
<i>Brachythecium reflexum</i>	Brachytheciaceae	G4G5	SH		
<i>Brachythecium turgidum</i>	Brachytheciaceae	G4	S1		
<i>Bryum calophyllum</i>	Bryaceae	G?	SH		
<i>Bryum lonchocaulon</i>	Bryaceae	G?	S1		
<i>Bryum pallens</i>	Bryaceae	G4G5	S1		
<i>Bryum schleicheri</i>	Bryaceae	G?	S1		Glac
<i>Bryum dichotomum</i>	Bryaceae	G5?	S1		Rava
<i>Bryum calobryoides</i>	Bryaceae	G3	SH		
<i>Callicladium haldanianum</i>	Hypnaceae	G5	SH		
<i>Calliergon richardsonii</i>	Amblystegiaceae	G3	S1		Glac
<i>Calliergon trifarium</i>	Amblystegiaceae	G4	S1		Glac
<i>Calliergonella cuspidata</i>	Amblystegiaceae	G5	S1		
<i>Catoscopium nigrum</i>	Catoscopiaceae	G4G5	S1		
<i>Cinclidium stygium</i>	Mniaceae	G5	S1		
<i>Crumia latifolia</i>	Pottiaceae	G3	S1		
<i>Cynodontium tenellum</i>	Dicranaceae	G?	SH		
<i>Dendroalsia abietina</i>	Cryphaeaceae	G4	SH		
<i>Desmatodon cernuus</i>	Pottiaceae	G3G5	SH		

Scientific Name	Family	Global Rank	State Rank	FS Status	County Distribution
Bryophytes (con't)					
<i>Desmatodon heimii</i>	Pottiaceae	G5	S1		Rava
<i>Dichodontium olympicum</i>	Dicranaceae	G?	S1		
<i>Dicranella grevilleana</i>	Dicranaceae	G?	S1		Flat, Glac
<i>Dicranella heteromalla</i>	Dicranaceae	G?	S1		Flat, Glac
<i>Dicranoweisia cirrata</i>	Dicranaceae	G4	S1		Park
<i>Dicranum acutifolium</i>	Dicranaceae	G?	S1		Rava
<i>Dicranum fragilifolium</i>	Dicranaceae	G4G5	S1		Flat, Glac, Lake
<i>Dicranum spadiceum</i>	Dicranaceae	G?	S1		
<i>Didymodon rigidulus</i> var <i>gracilis</i>	Pottiaceae	G5T5?	S1		
<i>Didymodon vinealis</i> var <i>brachyphyllus</i>	Pottiaceae	G5T?	S1		Rava
<i>Didymodon fallax</i> var <i>reflexus</i>	Pottiaceae	G5T5?	S1		
<i>Distichium inclinatum</i>	Ditrichaceae	G4G5	S1		Glac
<i>Entosthodon rubiginosus</i>	Funariaceae	G2G3	SH		Casc
<i>Eucladium verticillatum</i>	Pottiaceae	G4	S1		Gran, Powe
<i>Eurhynchium pulchellum</i> var <i>barnesii</i>	Brachytheciaceae	G5T?	S1		Lake, Rava, Sand
<i>Fabronia pusilla</i>	Fabroniaceae	G5?	S1		Madi
<i>Fissidens fontanus</i>	Fissidentaceae	G5	S1		Gran
<i>Funaria americana</i>	Funariaceae	G2G3	SH		
<i>Grimmia brittoniae</i>	Grimmiaceae	G1	S1	S	Flat, Sand
<i>Grimmia incurva</i>	Grimmiaceae	G4G5	S1		Rava
<i>Grimmia mollis</i>	Grimmiaceae	G3G5	S1		Flat
<i>Herzogiella striatella</i>	Hypnaceae	G4G5	S1		
<i>Herzogiella turfacea</i>	Hypnaceae	G4G5	S1		
<i>Hygroamblystegium noterophilum</i>	Amblystegiaceae	G4	S1		
<i>Hygrohypnum cochlearifolium</i>	Amblystegiaceae	G?	S1		Linc
<i>Hypnum callichroum</i>	Hypnaceae	G?	S1		
<i>Kiaeria blyttii</i>	Dicranaceae	G5	S1		Flat
<i>Kiaeria falcata</i>	Dicranaceae	G5	S1		
<i>Kiaeria starkei</i>	Dicranaceae	G5	S1		Glac
<i>Leucolepis acanthoneuron</i>	Mniaceae	G4	S1		
<i>Meesia longiseta</i>	Meesiaceae	G3G4	S1		
<i>Meesia triquetra</i>	Meesiaceae	G5	S1	S	Lake, Rava, Teto
<i>Meesia uliginosa</i>	Meesiaceae	G4	S1		Flat, Glac
<i>Mielichhoferia macrocarpa</i>	Bryaceae	G2?	S1		
<i>Myurella tenerrima</i>	Pterigynandraceae	G3?	S1		
<i>Neckera douglasii</i>	Neckeraceae	G4	S1		Flat, Lake
<i>Neckera pennata</i>	Neckeraceae	G5	S1		
<i>Oligotrichum aligerum</i>	Polytrichaceae	G5	S1		Linc
<i>Orthotrichum praemorsum</i>	Orthotrichaceae	G?	S1		Rava
<i>Oxystegus tenuirostris</i>	Pottiaceae	G5	SH		
<i>Paludella squarrosa</i>	Meesiaceae	G3G5	S1		Carb, Glac
<i>Paraleucobryum enerve</i>	Dicranaceae	G5?	S1		Glac
<i>Paraleucobryum longifolium</i>	Dicranaceae	G5	S1		Flat
<i>Phascum cuspidatum</i>	Pottiaceae	G5	S1		Rava
<i>Physcomitrium hookeri</i>	Funariaceae	G2G4	SH		
<i>Physcomitrium pyriforme</i>	Funariaceae	G5	SU		Rava
<i>Plagiobryum demissum</i>	Bryaceae	G?	S1		
<i>Plagiobryum zieri</i>	Bryaceae	G3G4	S1		

Scientific Name	Family	Global Rank	State Rank	FS Status	County Distribution
Bryophytes (con't)					
<i>Platyhypnidium riparioides</i>	Brachytheciaceae	G5	S1		
<i>Pohlia drummondii</i>	Bryaceae	G3G4	S1		
<i>Pohlia obtusifolia</i>	Bryaceae	G?	S1		
<i>Pohlia vexans</i>	Bryaceae	G?	SH		
<i>Polytrichum lyallii</i>	Polytrichaceae	G?	S1		
<i>Porotrichum bigelovii</i>	Thamnobryaceae	G4	S1		Rava
<i>Pseudocalliergon turgescens</i>	Amblystegiaceae	G3G5	S1		
<i>Pseudocrossidium obtusulum</i>	Pottiaceae	G?	S1		Rava
<i>Pterygoneurum lamellatum</i>	Pottiaceae	G?	S1		
<i>Pterygoneurum subsessile</i>	Pottiaceae	G4?	S1		Rava
<i>Ptychomitrium gardneri</i>	Ptychomitriaceae	G4	S1		
<i>Racomitrium aquaticum</i>	Grimmiaceae	G?	S1		
<i>Racomitrium pygmaeum</i>	Grimmiaceae	G?	S1		
<i>Racomitrium brevipes</i>	Grimmiaceae	G?	S1		
<i>Sarmenthypnum sarmentosum</i>	Amblystegiaceae	G4G5	S1		
<i>Schistostega pennata</i>	Schistostegaceae	G4	S1		
<i>Scorpidium scorpioides</i>	Amblystegiaceae	G4G5	S1	S	Flat, Miss, Teto
<i>Seligeria donniana</i>	Seligeriaceae	G4G5	S1		
<i>Sphagnum centrale</i>	Sphagnaceae	G5	S1		Flat
<i>Sphagnum compactum</i>	Sphagnaceae	G5	S1		Gran
<i>Sphagnum fimbriatum</i>	Sphagnaceae	G5	S1		Lewi
<i>Sphagnum girgensohnii</i>	Sphagnaceae	G5	S1		
<i>Sphagnum magellanicum</i>	Sphagnaceae	G5	S1		Flat, Miss, Rava
<i>Sphagnum mendocinum</i>	Sphagnaceae	G4	S1		Miss
<i>Sphagnum platyphyllum</i>	Sphagnaceae	G5	S1		
<i>Sphagnum riparium</i>	Sphagnaceae	G5	S1		Miss
<i>Sphagnum subnitens</i>	Sphagnaceae	G5	S1		
<i>Sphagnum wulfianum</i>	Sphagnaceae	G5	S1		
<i>Sphagnum contortum</i>	Sphagnaceae	G5	S1		Flat
<i>Sphagnum fallax</i>	Sphagnaceae	G5	S1		
<i>Stegonia latifolia</i>	Pottiaceae	G?	S1		
<i>Tayloria acuminata</i>	Splachnaceae	G3G4	SH		
<i>Tayloria lingulata</i>	Splachnaceae	G3G5	S1		Glac
<i>Tayloria serrata</i>	Splachnaceae	G4	S1		Madi
<i>Tetraplodon angustatus</i>	Splachnaceae	G3?	S1		Lewi
<i>Thamnobryum neckeroides</i>	Thamnobryaceae	G?	SH		
<i>Tortula bartramii</i>	Pottiaceae	G2G4	S1		Rava
<i>Tortula muralis</i>	Pottiaceae	G5	S1		
<i>Tortula norvegica</i>	Pottiaceae	G5	S1		Glac, Lake, Madi
<i>Tortula papillosa</i>	Pottiaceae	G5	S1		Rava, Sand
<i>Tortula caninervis</i>	Pottiaceae	G?	S1		
<i>Trachybryum megaptitum</i>	Brachytheciaceae	G4	S1		
<i>Warnstorfia exannulata</i>	Amblystegiaceae	G5	S1		
Lichens					
<i>Bryoria subdivergens</i>	Parmeliaceae	G2	S1	S	Rava
<i>Cetraria subalpina</i>	Parmeliaceae	G2G3	S1	S	
<i>Collema curtisporum</i>	Collemataceae	G1	S1	S	

Forest Service Sensitive Plant List

Threatened

Howellia aquatilis

Sensitive - Vascular

Adoxa moschatellina
Agastache cusickii
Allium acuminatum
Allium parvum
Allotropa virgata
Amerorchis rotundifolia
Antennaria densifolia
Aquilegia brevistyla
Arabis fecunda
Asclepias ovalifolia
Astragalus barrii
Astragalus lackschewitzii
Astragalus scaphoides
Athysanus pusillus
Balsamorhiza macrophylla
Bidens beckii
Botrychium ascendens
Botrychium crenulatum
Botrychium hesperium
Botrychium montanum
Botrychium paradoxum
Botrychium pedunculatum
Brasenia schreberi
Carex amplifolia
Carex chordorrhiza
Carex gravida var *gravida*
Carex livida
Carex parryana ssp *idahoensis*
Carex paupercula
Carex prairea
Carex rostrata
Carex vaginata
Castilleja covilleana
Castilleja gracillima
Castilleja pilosa var *longispica*
Cirsium longistylum
Clarkia rhomboidea
Claytonia arenicola
Cypripedium fasciculatum
Cypripedium parviflorum
Cypripedium passerinum
Drosera anglica
Drosera linearis
Dryopteris cristata
Eleocharis rostellata
Elymus innovatus
Epipactis gigantea
Erigeron asperugineus
Erigeron evermannii
Erigeron lackschewitzii
Eriophorum gracile
Eupatorium occidentale
Gentianopsis macounii
Gentianopsis simplex
Glossopetalon nevadense
Goodyera repens
Grindelia howellii
Halimolobos perplexa var *lemhiensis*
Haplopappus aberrans
Haplopappus carthamoides var *subsquarrosus*
Haplopappus macronema var *macronema*

Sensitive (continued)

Heteranthera dubia
Heterocodon rariflorum
Idaho scapigera
Juncus hallii
Kalmia polifolia
Lathyrus bijugatus
Lesquerella humilis
Lesquerella paysonii
Lesquerella pulchella
Liparis loeselii
Lomatium geyeri
Lomatogonium rotatum
Lycopodium dendroideum
Lycopodium inundatum
Lycopodium sitchense
Mertensia bella
Mimulus patulus
Mimulus primuloides
Ophioglossum pusillum
Orogenia fusiformis
Oxytropis campestris var *columbiana*
Oxytropis podocarpa
Penstemon lemhiensis
Penstemon payettensis
Petasites frigidus var *nivalis*
Phlox kelseyi var *missoulensis*
Polygonum douglasii ssp *austinae*
Potamogeton obtusifolius
Potentilla quinquefolia
Psilocarphus brevissimus var *brevissimus*
Ranunculus jovis
Salix barrattiana
Salix wolfii var *wolfii*
Saussurea weberi
Saxifraga tempestiva
Scheuchzeria palustris
Scirpus cespitosus
Scirpus subterminalis
Shoshonea pulvinata
Thalictrum alpinum
Thelypteris phegopteris
Thlaspi parviflorum
Trifolium eriocephalum ssp *arcuatum*
Trifolium gymnocarpon
Utricularia intermedia
Veratrum californicum
Viola renifolia
Waldsteinia idahoensis

Sensitive - Nonvascular

Bryoria subdivergens
Cetraria subalpina
Collema curtisporum
Grimmia brittoniae
Meesia triquetra
Scorpidium scorpioides

Bureau of Land Management Sensitive Plant List

Sensitive

Agastache cusickii
Arabis fecunda
Astragalus ceramicus var *apus*
Astragalus geyeri var *geyeri*
Astragalus scaphoides
Astragalus terminalis
Camissonia andina
Camissonia parvula
Carex crawei
Carex parryana ssp *idahoensis*
Cryptantha scoparia
Elymus flavescens
Eriogonum salsuginosum
Lesquerella carinata var *languida*
Lesquerella lescicii
Lesquerella pulchella
Lomatium attenuatum
Malacothrix torreyi
Nama densum
Oenothera pallida var *idahoensis*
Penstemon lemhiensis
Penstemon whippleanus
Quercus macrocarpa
Shoshonea pulvinata
Sphaeromeria argentea
Taraxacum eriophorum
Thalictrum alpinum
Thelypodium paniculatum

Watch

Adoxa moschatellina
Ambrosia acanthicarpa
Amerorchis rotundifolia
Arabis demissa var *languida*
Asclepias ovalifolia
Asclepias stenophylla
Astragalus aretioides
Astragalus barrii
Astragalus convallarius var *convallarius*
Astragalus oregonus
Astragalus racemosus var *longisetus*
Atriplex truncata
Bacopa rotundifolia
Balsamorhiza macrophylla
Bidens comosa
Bidens vulgata var *schizantha*
Carex eburnea
Carex gravida var *gravida*
Carex multicostrata
Carex occidentalis
Carex torreyi
Castilleja gracillima
Castilleja pilosa var *longispica*
Ceanothus herbaceus var *pubescens*
Celastrus scandens
Centunculus minimus
Cercocarpus montanus var *glaber*
Chenopodium subglabrum
Chrysothamnus linifolius
Chrysothamnus parryi ssp *montanus*
Cleome lutea
Cryptantha fendleri
Cryptantha humilis

Watch (continued)

Cyperus acuminatus
Cyperus schweinitzii
Cypripedium parviflorum
Dalea enneandra
Dalea villosa var *villosa*
Dichanthelium oligosanthes var *scribnerianum*
Downingia laeta
Draba globosa
Eleocharis rostellata
Elodea longivaginata
Epipactis gigantea
Erigeron asperugineus
Erigeron formosissimus var *viscidus*
Eupatorium maculatum var *bruneri*
Eustoma grandiflorum
Gentianopsis macounii
Gentianopsis simplex
Grayia spinosa
Halimolobos virgata
Haplopappus carthamoides var *subsquarrosus*
Hutchinsia procumbens
Leptodactylon caespitosum
Lomatium nuttallii
Lomatogonium rotatum
Menizelia nuda
Mentzelia pumila
Mirabilis hirsuta
Najas guadalupensis
Nuttallanthus texanus
Oryzopsis contracta
Penstemon angustifolius
Phacelia incana
Phacelia scopulina
Phacelia thermalis
Phlox andicola
Plagiobothrys leptocladus
Poa curta
Polygonum polygaloides
Potentilla plattensis
Primula alcalina
Primula incana
Psilocarphus brevissimus var *brevissimus*
Psoralea hypogaea
Ranunculus cardiophyllus
Ranunculus pedatifidus
Rorippa calycina
Salix serissima
Solidago sparsiflora
Sphenopholis intermedia
Spiranthes diluvialis
Sporobolus asper
Sporobolus neglectus
Stellaria crassifolia
Stellaria jamesiana
Stephanomeria spinosa
Sullivantia hapemanii var *hapemanii*
Townsendia condensata
Townsendia florifer
Townsendia nuttallii
Veratrum californicum
Viola renifolia
Wolffia columbiana

Plant Species of Special Concern Survey Form

MONTANA NATURAL HERITAGE PROGRAM

P.O. Box 201800, 1515 E. Sixth Avenue, Helena, MT 59620-1800

SCIENTIFIC NAME: _____ DATE OF SURVEY: ____/____/____

OBSERVER(S): _____

WORK LOCATION / ADDRESS: _____

Location: (attach a copy of pertinent 7.5' or 15' topographic map section with locations of populations/subpopulations outlined, one map for each sensitive species described.)

COUNTY: _____ USGS QUAD: _____

TOWNSHIP: _____ RANGE: _____ SEC.(s): _____ ¼ SEC.: _____

ADDITIONAL T/R/S, SECTIONS OR ¼ SEC.: _____

NATL. FOREST DISTRICT/BLM DISTRICT RA/OTHER: _____

DIRECTIONS TO SITE (Refer to towns, roads, trails, other geographic features): _____

Species Autecology

TOTAL NUMBER OF INDIVIDUALS (estimated or exact population count; sum clumps or stems if vegetative):

NUMBER OF SUBPOPULATIONS AND SUBTOTALS (if applicable): _____

SIZE OF AREA COVERED BY POPULATION (acres): _____

PHENOLOGY (% flowering, fruiting, vegetative): _____

EVIDENCE OF DISEASE, PREDATION, INJURY: _____

EVIDENCE OF SEED DISPERSAL, ESTABLISHMENT: _____

POPULATION TREND/OTHER COMMENTS: _____

Habitat: (Describe the distinguishing features of the environment on next page, adding landform and the nature of the species' habitat in the setting):

ELEVATION (mean or range): _____ ASPECT: ☐N ☐NE ☐E ☐SE ☐S ☐SW ☐W ☐NW

% SLOPE: _____ SLOPE SHAPE ☐ Concave ☐ Convex ☐ Straight ☐ Other _____

TOPOGRAPHY: ☐ Crest ☐ Upper ☐ Mid ☐ Lower ☐ Bottom ☐ Other _____

MOISTURE: ☐ Dry ☐ Moist ☐ Saturated ☐ Inundated ☐ Seasonal seepage ☐ Other _____

LIGHT EXPOSURE: ☐ Open ☐ Shaded ☐ Partial shade ☐ Other _____

PARENT MATERIAL: _____

SURFACE COVER (TOTAL %): MOSS/LICHEN _____ BASAL VEG. _____ BARE GROUND _____

SOIL TEXTURE/SERIES: _____

CANOPY COVER: TREE (%) _____ SHRUB (%) _____ FORB (%) _____ GRAMINOID(%) _____

PLANT COMMUNITY: (dominant species at present, age and structure notes): _____

CLIMAX VEGETATION (if not above): _____

ADDITIONAL ASSOCIATED PLANTS (include most common, conspicuous, and characteristic spp.): _____

EVIDENCE OF DISTURBANCE: _____

Documentation:

PHOTOGRAPH TAKEN? (if so, indicate photographer and depository): _____

SPECIMEN TAKEN? (if so, list collector, collection #, and repository): _____

IDENTIFICATION (name of person making determination, and/or flora used): _____

ECODATA PLOT NUMBER (attach photocopied data sheets): _____

OTHER DOCUMENTATION OR REFERENCES: _____

Comments: